REMARKS

Claims 1 to 4 and 6 to 53 are pending in this case and have been subjected to restriction and election requirement by the Examiner. The Examiner considers that the claims relate to four inventions as follows:

- I. Claims 1 to 4, 6 to 12, and 49 to 53, drawn to a method of detecting an organism using substrate (or product) fluorescence and a partitioning element;
- II. Claims 13 to 23, drawn to an optical probe and apparatus, both with partitioning element for detecting a molecule;
- III. Claims 24 to 35 and 36 to 41, drawn to a system and kit for detecting the presence of an organism by the fluorescence of an enzyme substrate or product observed within a partitioning element; and
- IV. Claims 42 to 48, drawn to a method of detecting a target species using antibody binding and a partitioning element.

At the outset, Applicants suggest that claims 36 to 41, included in Group III, should be included in Group II, because they depend from claim 18.

Restriction of the claims as set forth above is respectfully traversed. Applicants request rejoinder of Groups I and III, and believe that such rejoinder is appropriate for at least the following reason:

The Examiner was of the opinion that the inventions of Groups I, II, and III are distinct, citing MPEP § 806.05(h) in that (1) the process for using the product as claimed can be practiced with another materially different product, or (2) the product as claimed can be used in a materially different process of using that product.

As to (1), the Examiner suggested that the method of Group I could be practiced with the probe/apparatus of Group II, or the system of Group III. The method of Group I requires detecting fluorescence of a molecule of interest in a partitioning element. However, the probe/apparatus of Group II and the system of Group III both require a partitioning element, partitioning of a molecule of interest into the partitioning element, and detection of fluorescence of the molecule in the partitioning element. Therefore, practicing the process of Group I with the

inventions of Group II or III does not constitute practising the process with materially different products.

As to (2), the Examiner suggested that the system of Group III "has separate utility as a standard fluorimeter, using higher concentrations of fluorescent materials which did not partition into the membrane". However, claim 24 recites that the detector "detects fluorescence of said biological molecules partitioned into said partitioning element". Thus, claim 24 is drawn to a system wherein fluorescence of molecules partitioned into the partitioning element is detected. Therefore, the system of Group III cannot be used as a standard fluorimeter, contrary to the Examiner's assertion.

In view of the foregoing, reconsideration and rejoinder of Groups I and III is respectfully requested. However, to be fully responsive to the current Office Action, Applicants elect Group III.

Should the Examiner believe that a personal communication will expedite the prosecution of this application, he is invited to telephone the undersigned at the number provided below.

Respectfully submitted,

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